UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

November 29, 2011

Mr. Ron Barnett
Barnette Bros. Construction
2225 East River Road
Moraine, OH 45439

Beginning the week of Dec. 5, the U.S. Environmental Protection Agency and contractors for the parties potentially responsible for contamination at the former South Dayton Dump and Landfill in Moraine, Ohio will inspect three additional on-site buildings as part of a vapor intrusion study.

Earlier inspections were done in June at other site buildings and now the actual vapor intrusion sampling equipment will be installed and sampling will take place at all the buildings involved in this study. For more information please read the enclosed fact sheet and site map and please share this with employees at your business.

Availability Session

EPA will be available to talk to business owners and employees at the **Moraine Civic Center, 3050 Kreitzer Road, Moraine Ohio** on the following dates:

6:30 p.m. Tuesday, Dec. 6
10:00 a.m. Wednesday, Dec. 7

EPA will also be dropping off fact sheets in person on December 5 and 6. If you have any questions please contact Karen Cibulskis, Project Manager, at 312-886-1843 or cibulskis.karen@epa.gov or Patricia Krause, Community Involvement Coordinator, at 312-886-9506 or krause.patricia@epa.gov.

Sincerely,

Karen Cibulskis

Karen Cibulskis
Remedial Project Manager

Enclosures

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

November 29, 2011

Mr. Mark Fornes
Mark Fornes Realty
7755 Paragon Road
#106
Dayton, OH 45459

Beginning the week of Dec. 5, the U.S. Environmental Protection Agency and contractors for the parties potentially responsible for contamination at the former South Dayton Dump and Landfill in Moraine, Ohio will inspect three additional on-site buildings as part of a vapor intrusion study.

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Sincerely,

Karen Cibulskis
Remedial Project Manager

Enclosures

EPA
United States
Environmental Protection
Agency

More Vapor Sampling Planned Around Landfill Site

South Dayton Dump and Landfill

Moraine, Ohio — December 2011

For more information

EPA will host two availability sessions to share information about the vapor intrusion study and next steps:

Tuesday Dec. 6, 6:30 p.m.
Wednesday, Dec. 7, 10 a.m.
Moraine Civic Center
3050 Kreitzer Road
Moraine, Ohio

EPA contacts
For general questions or comments:
Patricia Krause
EPA Community Involvement Coordinator
Superfund Division
312-886-9506
krause.patricia@epa.gov

For technical questions:
Karen Cibulskis
EPA Remedial Project Manager
Superfund Division
312-886-1843
cibulskis.karen@epa.gov

Region 5 toll-free: 800-621-8431, 9:30 a.m. – 5:30 p.m., weekdays

On the Web
www.epa.gov/region5/cleanup/sodayton

Read the documents
The official information repository on the South Dayton Dump and Landfill site containing documents you can review is located at:
Montgomery County Library
Kettering - Moraine Branch
3496 Far Hills Ave.
Kettering

Beginning the week of Dec. 5, the U.S. Environmental Protection Agency and contractors working for the parties potentially responsible for contamination will inspect three additional buildings as part of a vapor intrusion study at the former South Dayton Dump and Landfill in Moraine. Vapor intrusion occurs when chemicals in the ground or underground water supplies (called "ground water" in environmental terms) give off dangerous gases that can rise up through the soil and seep into buildings through foundation cracks and holes, causing unsafe indoor air pollution.

Earlier inspections were done in June at other site buildings, and now the actual vapor intrusion sampling equipment will be installed and testing conducted at all the buildings involved in this study.

Businesses and buildings

The businesses and buildings involved in the vapor intrusion study are located within and next to the 80-acre former South Dayton Dump and Landfill located west of Dryden Road and to the north of East River Road in Moraine.

Vapor intrusion generally occurs when volatile chemicals from contaminated ground water or contaminated soil move into an overlying building. In extreme cases the vapors may accumulate in occupied buildings to levels that may pose a safety hazard to workers or residents in

Figure 1. Migration of Soil Vapors to Indoor Air

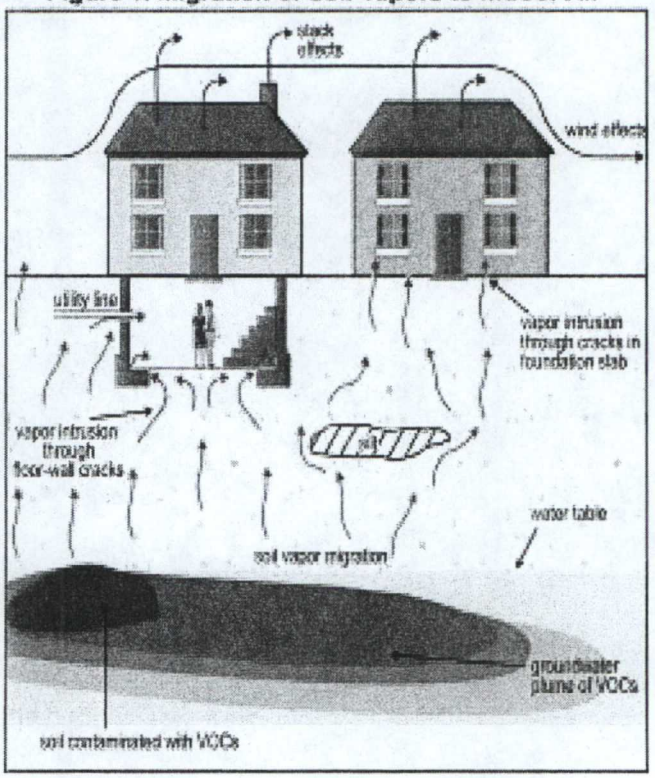


Figure 1 shows the vapor intrusion process. Pollutants in contaminated soil or underground water (ground water) supplies give off gases. These vapors can rise through gaps in the soil and seep into buildings causing hazardous indoor air pollution. Testing in the soil below the surface and indoor air samples can confirm or deny the existence of a vapor intrusion problem.

the buildings.

Two parts

There are two parts to the South Dayton Dump and Landfill vapor intrusion study. The first part is to drill small one-inch holes into the foundation of each structure and collect samples of soil gas below the building to see if the fumes contain chemicals at high enough concentrations to pose a potential indoor air threat to building occupants. This is known as sub-slab sampling.

The second part of the study is to go back to locations where high levels of contaminants were detected to collect another round of sub-slab soil gas samples, as well as indoor air samples. Depending on the indoor air results, mitigation systems that reduce gas levels can be installed. If contaminants are not detected or detected at low levels, another round of sub-slab soil gas as well as indoor air sampling will be collected during the summer.

Next steps

Here is EPA's anticipated schedule over the next several months for the vapor intrusion investigation:

December 2011

- Plan exactly where sub-slab samples will be collected within each study building.
- Use private utility locators to make sure planned sampling locations are not placed over utility lines and wires.
- Begin drilling holes in foundations and installing sampling ports.

January 2012

- Connect soil sampling canisters to sub-slab sampling ports and collect samples over an eight-hour period for businesses and 24 hours at a nearby residence.
- Send samples to lab for analysis.

February 2012

- Evaluate sub-slab data and make plans to re-test soil gas and indoor air samples at locations that detected potentially high concentrations of contaminants.

March 2012

- Collect a second round of sub-slab and indoor air samples.

May 2012

- Share sampling results with property and business owners. Make plans to install mitigation systems or take other measures to lessen health risks in buildings where high levels of contaminants were detected inside.

June 2012

- Install mitigation systems or other measures to ease vapor intrusion issues. Conduct another round of sub-slab and indoor air testing where no or only low levels of contaminants were detected to make sure concentrations remain steady.
- Develop a plan to monitor mitigation systems and other protection measures to confirm that building occupants are safe from pollutants.

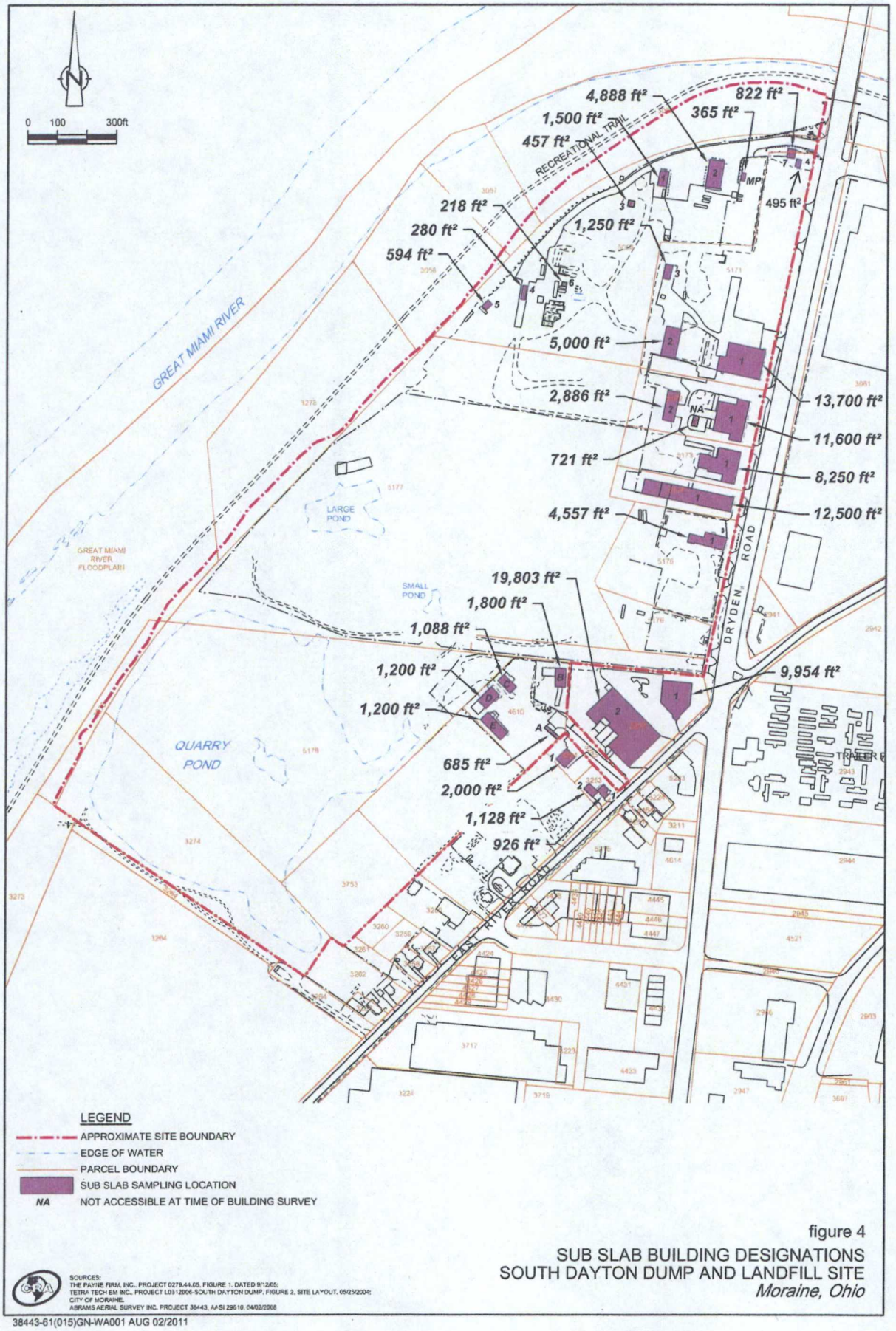
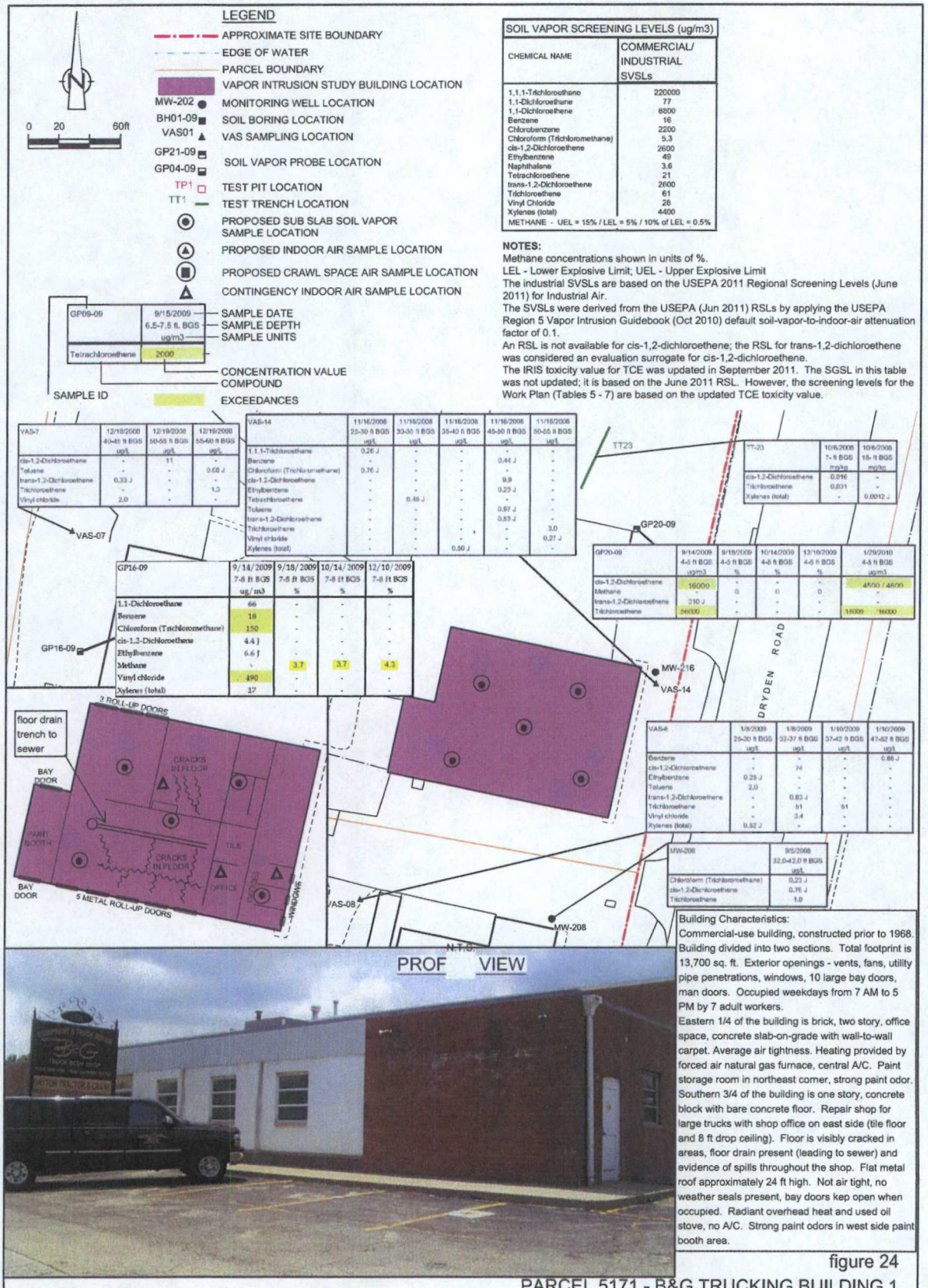


figure 4

SUB SLAB BUILDING DESIGNATIONS
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE,
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-61(015)GN-WA001 AUG 02/2011



Building Characteristics:
Commercial-use building, constructed prior to 1968. Building divided into two sections. Total footprint is 13,700 sq. ft. Exterior openings - vents, fans, utility pipe penetrations, windows, 10 large bay doors, man doors. Occupied weekdays from 7 AM to 5 PM by 7 adult workers.
Eastern 1/4 of the building is brick, two story, office space, concrete slab-on-grade with wall-to-wall carpet. Average air tightness. Heating provided by forced air natural gas furnace, central A/C. Paint storage room in northeast corner, strong paint odor. Southern 3/4 of the building is one story, concrete block with bare concrete floor. Repair shop for large trucks with shop office on east side (tile floor and 8 ft drop ceiling). Floor is visibly cracked in areas, floor drain present (leading to sewer) and evidence of spills throughout the shop. Flat metal roof approximately 24 ft high. Not air tight, no weather seals present, bay doors kep open when occupied. Radiant overhead heat and used oil stove, no A/C. Strong paint odors in west side paint booth area.

figure 24

PARCEL 5171 - B&G TRUCKING BUILDING 1
1951 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM INC., PROJECT 0278.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L03*2008-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT 05/25/2004;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC, PROJECT 38443, AASI 29610, 04/02/2008

38443-61(015)GN-WA022 AUG 09/2011

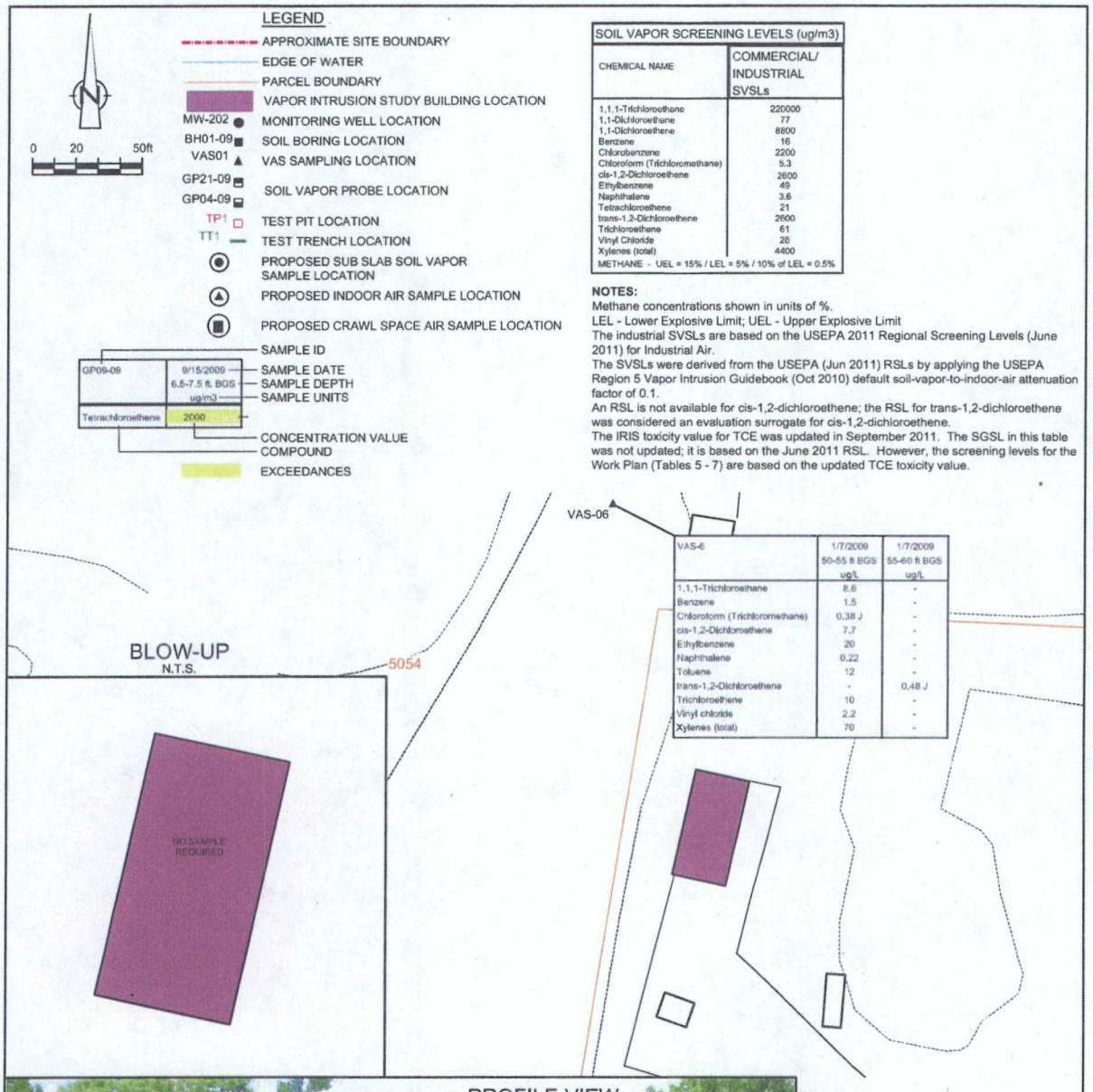
Building Characteristics:
Commercial-use concrete block building, constructed prior to 1968. Used for large truck repair with office/break room on the south side. Total footprint is 5,000 sq. ft. Slab-on-grade, unsealed poured concrete with some cracks and one large floor drain, with visible staining. One story building, approximately 20 ft high. Southern 1/3 of building has a 2nd story within the building, storage space only. Approximately 8 ft ceilings in 1st and 2nd floor of southern 1/3 of building. Ceiling in the shop area (northern 2/3 of building) is 20 ft high. Heating provided by natural gas. Radiant ceiling heating system and floor fans are present. Not insulated, not air tight, bay door kept open during work hours. Exterior openings - vent fans, utility pipe penetrations, windows, 1 large bay door, man doors. Occupied weekdays from 7 AM to 5 PM by 2 adult workers.

figure 25

PARCEL 5171 - B&G TRUCKING BUILDING 2
1951 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM INC., PROJECT 0278.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L03120G8-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC, PROJECT 38443, AASI 29616, 04/02/2008

38443-61(015)GN-WA023 AUG 09/2011



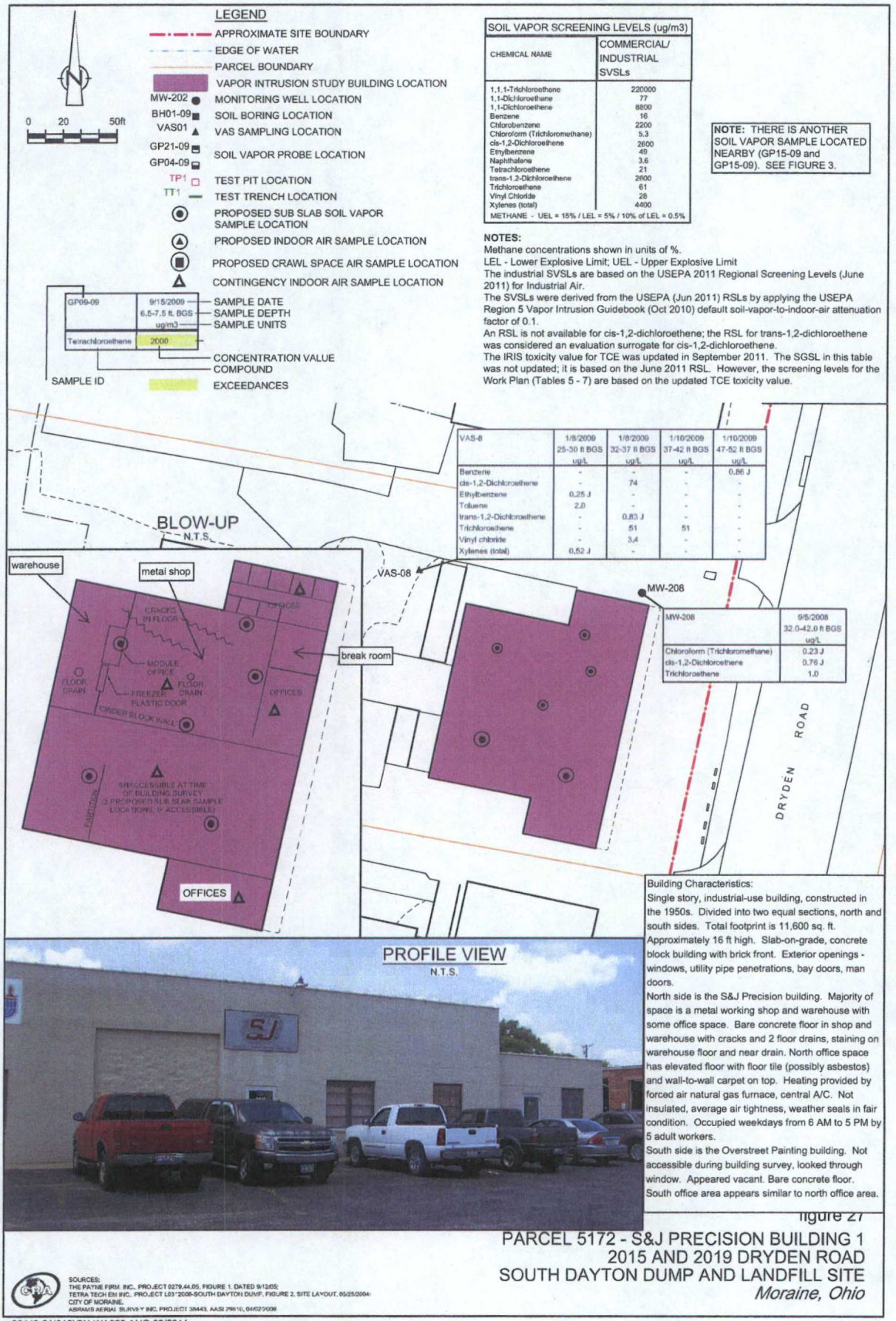
Building Characteristics:
Single-story commercial-use structure, used for sandblasting, erected by 2000. 1,250 sq. ft, structure composed of canvas steel frame, covered with fabric and placed on asphalt, with retractable canvas flaps at both ends. Floor is damp with cracks. No HVAC system present in structure Occupied as needed weekdays from 7 AM to 5 PM

figure 26

PARCEL 5171 - B&G TRUCKING BUILDING 3
1951 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L03*2006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC, PROJECT 38443, AASI 29616, 04/07/2008

38443-61(015)GN-WA024 AUG 09/2011



SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethene	77
1,1-Dichloroethene	8800
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	26
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTE: THERE IS ANOTHER SOIL VAPOR SAMPLE LOCATED NEARBY (GP15-09 and GP15-09). SEE FIGURE 3.

NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.

VAS-8	1/8/2009 25-30 ft BGS ug/L	1/8/2009 32-37 ft BGS ug/L	1/10/2009 37-42 ft BGS ug/L	1/10/2009 47-52 ft BGS ug/L
Benzene	-	-	-	0.86 J
cis-1,2-Dichloroethene	-	74	-	-
Ethylbenzene	0.25 J	-	-	-
Toluene	2.0	-	-	-
trans-1,2-Dichloroethene	-	0.83 J	-	-
Trichloroethene	-	51	51	-
Vinyl chloride	-	3.4	-	-
Xylenes (total)	0.52 J	-	-	-

MW-208	9/5/2008 32.0-42.0 ft BGS ug/L
Chloroform (Trichloromethane)	0.23 J
cis-1,2-Dichloroethene	0.76 J
Trichloroethene	1.0

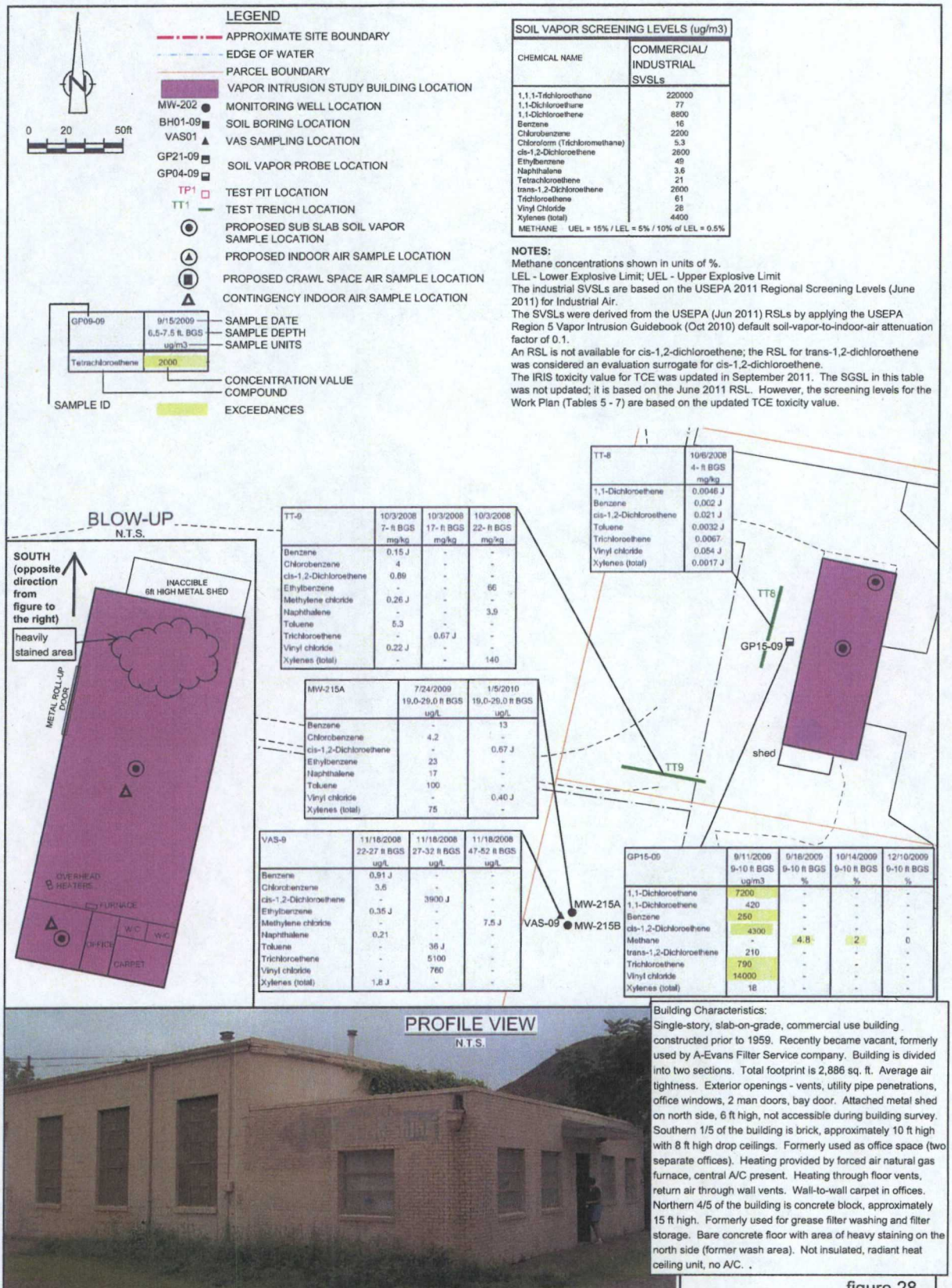
Building Characteristics:
Single story, industrial-use building, constructed in the 1950s. Divided into two equal sections, north and south sides. Total footprint is 11,600 sq. ft. Approximately 16 ft high. Slab-on-grade, concrete block building with brick front. Exterior openings - windows, utility pipe penetrations, bay doors, man doors.
North side is the S&J Precision building. Majority of space is a metal working shop and warehouse with some office space. Bare concrete floor in shop and warehouse with cracks and 2 floor drains, staining on warehouse floor and near drain. North office space has elevated floor with floor tile (possibly asbestos) and wall-to-wall carpet on top. Heating provided by forced air natural gas furnace, central A/C. Not insulated, average air tightness, weather seals in fair condition. Occupied weekdays from 6 AM to 5 PM by 5 adult workers.
South side is the Overstreet Painting building. Not accessible during building survey, looked through window. Appeared vacant. Bare concrete floor. South office area appears similar to north office area.

figure 27

PARCEL 5172 - S&J PRECISION BUILDING 1
2015 AND 2019 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L03*2008-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC, PROJECT 38443, AASI 29610, 04/02/2008

38443-61(015)GN-WA025 AUG 09/2011



SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8800
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE	UEL = 15% / LEL = 5% / 10% of LEL = 0.5%

NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.

TT-9	10/3/2008 7- ft BGS mg/kg	10/3/2008 17- ft BGS mg/kg	10/3/2008 22- ft BGS mg/kg
Benzene	0.15 J	-	-
Chlorobenzene	4	-	-
cis-1,2-Dichloroethene	0.89	-	-
Ethylbenzene	-	-	66
Methylene chloride	0.26 J	-	-
Naphthalene	-	-	3.9
Toluene	5.3	-	-
Trichloroethene	-	0.67 J	-
Vinyl chloride	0.22 J	-	-
Xylenes (total)	-	-	140

TT-8	10/6/2008 4- ft BGS mg/kg
1,1-Dichloroethene	0.0046 J
Benzene	0.002 J
cis-1,2-Dichloroethene	0.021 J
Toluene	0.0032 J
Trichloroethene	0.0067
Vinyl chloride	0.054 J
Xylenes (total)	0.0017 J

MW-215A	7/24/2009 19.0-29.0 ft BGS ug/L	1/5/2010 19.0-29.0 ft BGS ug/L
Benzene	-	13
Chlorobenzene	4.2	-
cis-1,2-Dichloroethene	-	0.67 J
Ethylbenzene	23	-
Naphthalene	17	-
Toluene	100	-
Vinyl chloride	-	0.40 J
Xylenes (total)	75	-

VAS-9	11/18/2008 22-27 ft BGS ug/L	11/18/2008 27-32 ft BGS ug/L	11/18/2008 47-52 ft BGS ug/L
Benzene	0.91 J	-	-
Chlorobenzene	3.6	-	-
cis-1,2-Dichloroethene	-	3900 J	-
Ethylbenzene	0.35 J	-	-
Methylene chloride	-	-	7.5 J
Naphthalene	0.21	-	-
Toluene	-	36 J	-
Trichloroethene	-	5100	-
Vinyl chloride	-	760	-
Xylenes (total)	1.8 J	-	-

GP15-09	9/11/2009 9-10 ft BGS ug/m3	9/18/2009 9-10 ft BGS %	10/14/2009 9-10 ft BGS %	12/10/2009 9-10 ft BGS %
1,1-Dichloroethane	7200	-	-	-
1,1-Dichloroethene	420	-	-	-
Benzene	250	-	-	-
cis-1,2-Dichloroethene	4300	-	-	-
Methane	-	4.8	2	0
trans-1,2-Dichloroethene	210	-	-	-
Trichloroethene	790	-	-	-
Vinyl chloride	14000	-	-	-
Xylenes (total)	18	-	-	-

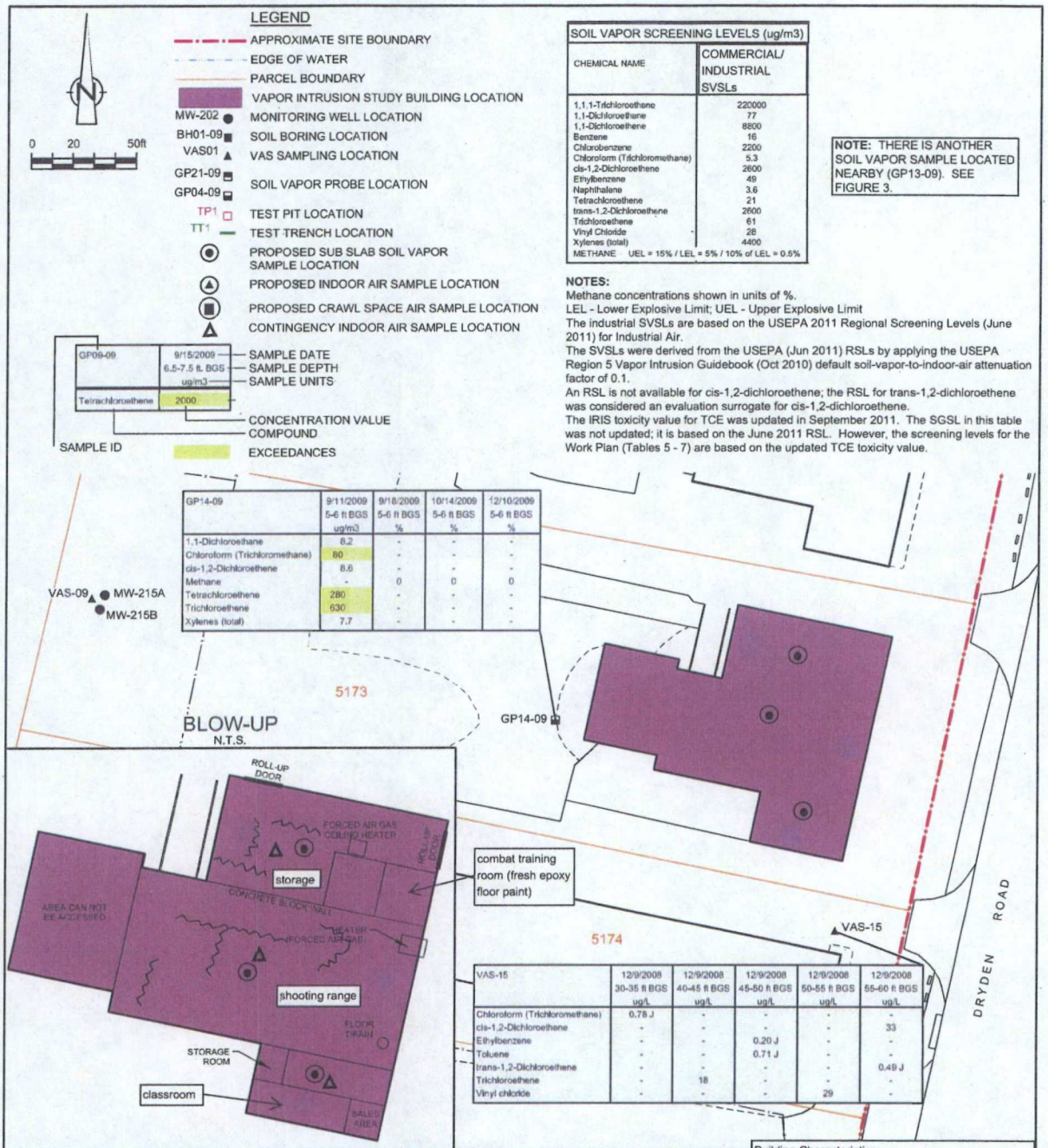
Building Characteristics:
Single-story, slab-on-grade, commercial use building constructed prior to 1959. Recently became vacant, formerly used by A-Evans Filter Service company. Building is divided into two sections. Total footprint is 2,886 sq. ft. Average air tightness. Exterior openings - vents, utility pipe penetrations, office windows, 2 man doors, bay door. Attached metal shed on north side, 6 ft high, not accessible during building survey. Southern 1/5 of the building is brick, approximately 10 ft high with 8 ft high drop ceilings. Formerly used as office space (two separate offices). Heating provided by forced air natural gas furnace, central A/C present. Heating through floor vents, return air through wall vents. Wall-to-wall carpet in offices. Northern 4/5 of the building is concrete block, approximately 15 ft high. Formerly used for grease filter washing and filter storage. Bare concrete floor with area of heavy staining on the north side (former wash area). Not insulated, radiant heat ceiling unit, no A/C. .

figure 28

PARCEL 5172 - FORMER A-EVANS AIR FILTER SERVICE BUILDING 2
2003 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312606-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE,
ABRAMS AERIAL SURVEY INC, PROJECT 38443, AASI 29610, 04/02/2008

38443-61(015)GN-WA026 AUG 09/2011



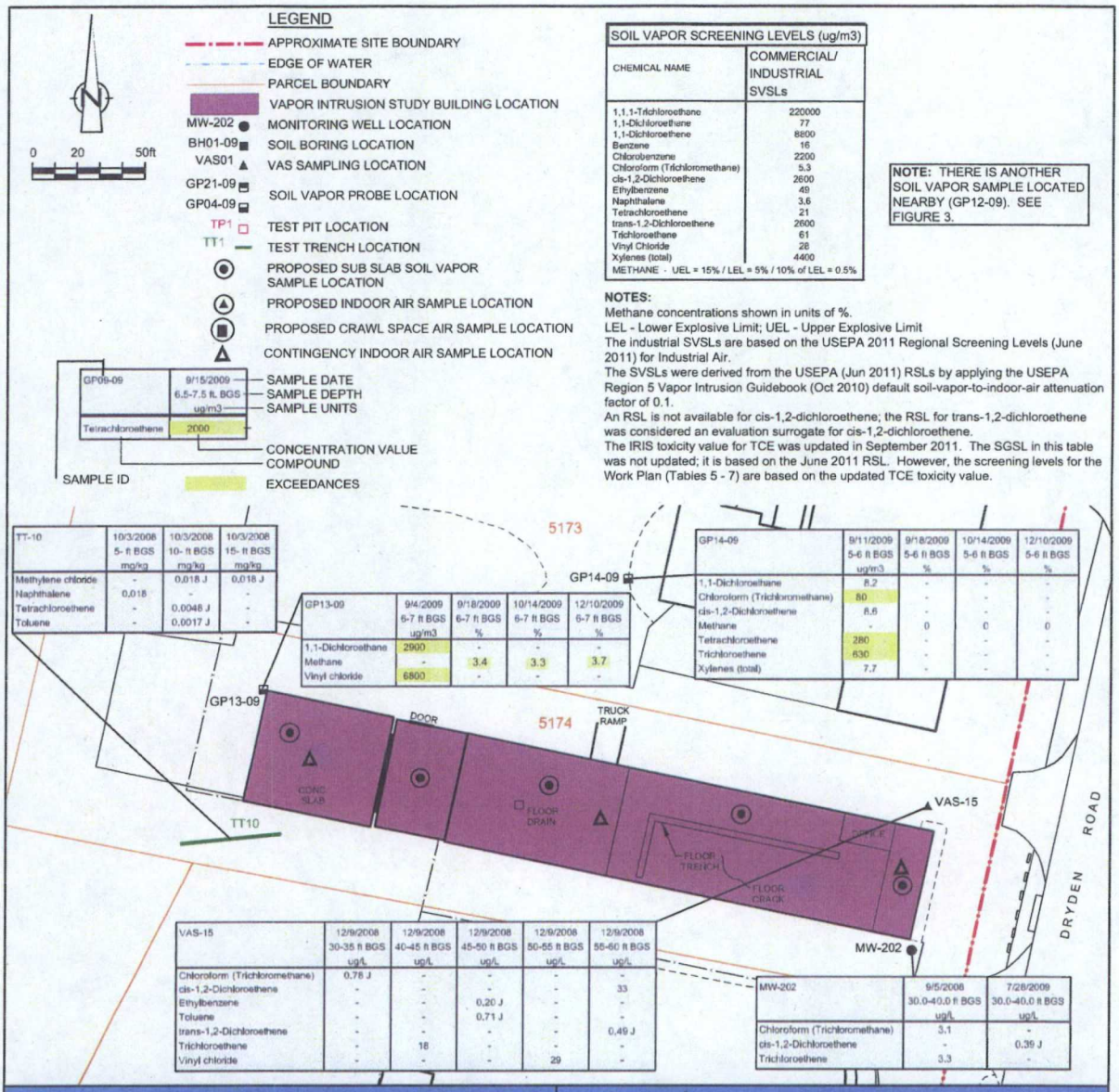
Building Characteristics:
Single-story, commercial use building constructed in three stages (north and center portions prior to 1956, western addition prior to 1959, southern addition prior to 1968). Total footprint is 8,250 sq. ft. Concrete block building with brick front. Slab-on-grade, bare concrete or painted concrete, fresh epoxy coat in north side combat training room, large cracks in the shooting range. Heavy staining and oil odor in storage area. Range heated by forced air natural gas ceiling units. Air handling unit pulls air from the range out the roof, operated during business hours. Forced air natural gas heat and central A/C in south section. Exterior openings - vents, fans, windows, 2 bay doors and two man doors. Occupied during business hours by one adult worker (4-hour shifts) and customers.

figure 29

PARCEL 5173 - SIM TRAINER BUILDING 1
2031 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM INC., PROJECT 0278.44.05, FIGURE 1, DATED 9/13/05;
TETRA TECH EM INC., PROJECT L031208-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE,
ABRAMS AERIAL SURVEY INC, PROJECT 38443, AASI 29616, 04/02/2008

38443-61(015)GN-WA027 AUG 09/2011



SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8800
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTE: THERE IS ANOTHER SOIL VAPOR SAMPLE LOCATED NEARBY (GP12-09). SEE FIGURE 3.

NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.

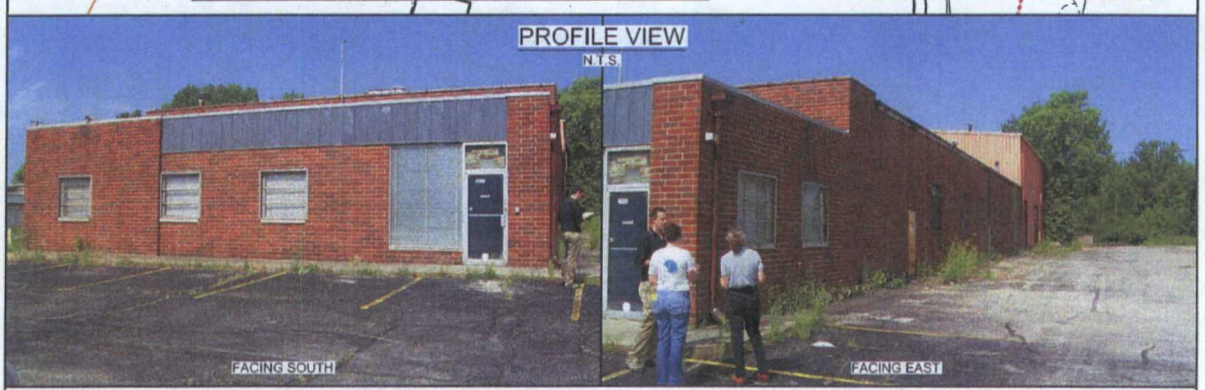
TT-10	10/3/2008 5- ft BGS mg/kg	10/3/2008 10- ft BGS mg/kg	10/3/2008 15- ft BGS mg/kg
Methylene chloride	-	0.018 J	0.018 J
Naphthalene	0.018	-	-
Tetrachloroethene	-	0.0048 J	-
Toluene	-	0.0017 J	-

GP13-09	9/4/2009 6-7 ft BGS ug/m3	9/18/2009 6-7 ft BGS %	10/14/2009 6-7 ft BGS %	12/10/2009 6-7 ft BGS %
1,1-Dichloroethane	2900	-	-	-
Methane	-	3.4	3.3	3.7
Vinyl chloride	6800	-	-	-

GP14-09	9/11/2009 5-6 ft BGS ug/m3	9/18/2009 5-6 ft BGS %	10/14/2009 5-6 ft BGS %	12/10/2009 5-6 ft BGS %
1,1-Dichloroethane	8.2	-	-	-
Chloroform (Trichloromethane)	80	-	-	-
cis-1,2-Dichloroethene	8.6	-	-	-
Methane	-	0	0	0
Tetrachloroethene	280	-	-	-
Trichloroethene	630	-	-	-
Xylenes (total)	7.7	-	-	-

VAS-15	12/9/2008 30-35 ft BGS ug/L	12/9/2008 40-45 ft BGS ug/L	12/9/2008 45-50 ft BGS ug/L	12/9/2008 50-55 ft BGS ug/L	12/9/2008 55-60 ft BGS ug/L
Chloroform (Trichloromethane)	0.78 J	-	-	-	-
cis-1,2-Dichloroethene	-	-	-	-	33
Ethylbenzene	-	-	0.20 J	-	-
Toluene	-	-	0.71 J	-	-
trans-1,2-Dichloroethene	-	-	-	-	0.49 J
Trichloroethene	-	18	-	-	-
Vinyl chloride	-	-	-	29	-

MW-202	9/5/2008 30.0-40.0 ft BGS ug/L	7/28/2009 30.0-40.0 ft BGS ug/L
Chloroform (Trichloromethane)	3.1	-
cis-1,2-Dichloroethene	-	0.39 J
Trichloroethene	3.3	-

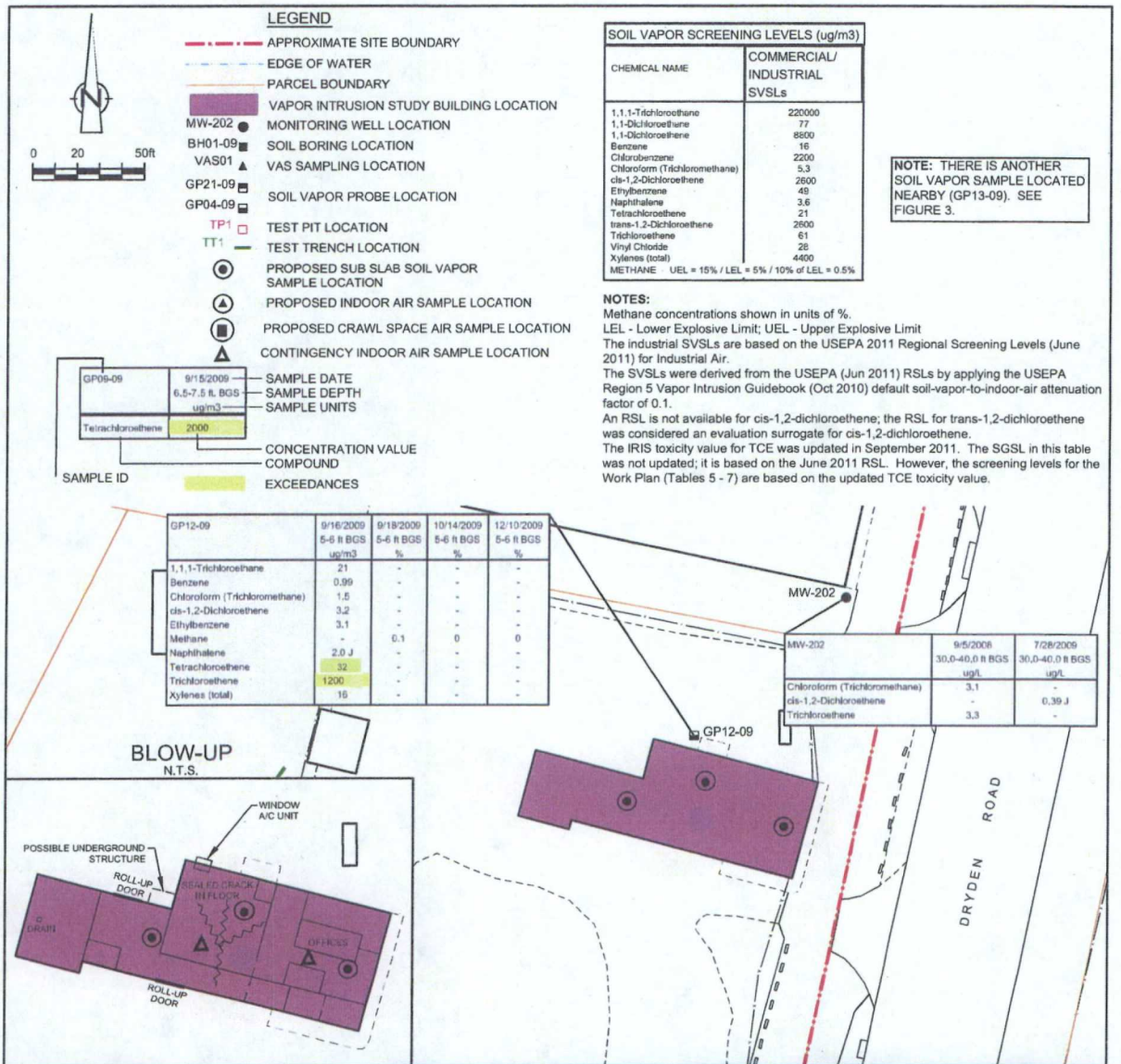


Building Characteristics:
Single-story, commercial-use storage building, constructed prior to 1968. 12,500 sq. ft concrete slab-on-grade building. Areas A (approximately 12 ft high) and B (approximately 16 ft high) constructed with brick, with weather seals in poor condition. Spray-on insulation (possible asbestos) used in Area B. Areas C (approximately 24 ft high) to E constructed with steel beams and metal siding. No HVAC systems in use as of June 2011. Not air tight. Damp and moldy, with visible evidence of water staining in office area A. Floor slab in poor condition, with cracks and unsealed joints throughout the building, particularly cracked in Areas D and E. Heavy floor staining in areas B through E. Exterior openings - office windows, personnel doors, sliding and roll-up doors. Infrequent and variable occupancy by 2 adults.

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312008-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC, PROJECT 38443, AASI 29616, 04/02/2008

figure 30
PARCEL 5174 - COMMAND ROOFING BUILDING 1
2045 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-61(015)GN-WA028 AUG 09/2011



Building Characteristics:
Single-story, commercial-use building, constructed prior to 1949. 4,557 sq. ft. slab-on-grade, unsealed concrete building, with crawl space possibly present on south side. Shallow concrete pit present in southwest corner of warehouse. Large sealed floor cracks observed in middle portion of building. Floor staining observed in warehouse and rear storage shed. Gasoline UST removed from former Conway Fence facility in 1990. Weather seals in poor condition. Overhead doors open at time of building survey. Heated by forced air natural gas furnace. Central A/C present in retail and office areas. Window unit A/C present in northern portion of building. Exterior openings - vents, fans, utility pipe penetrations, windows, overhead and personnel doors.
Occupancy - tenant about to vacate premises at time of building survey

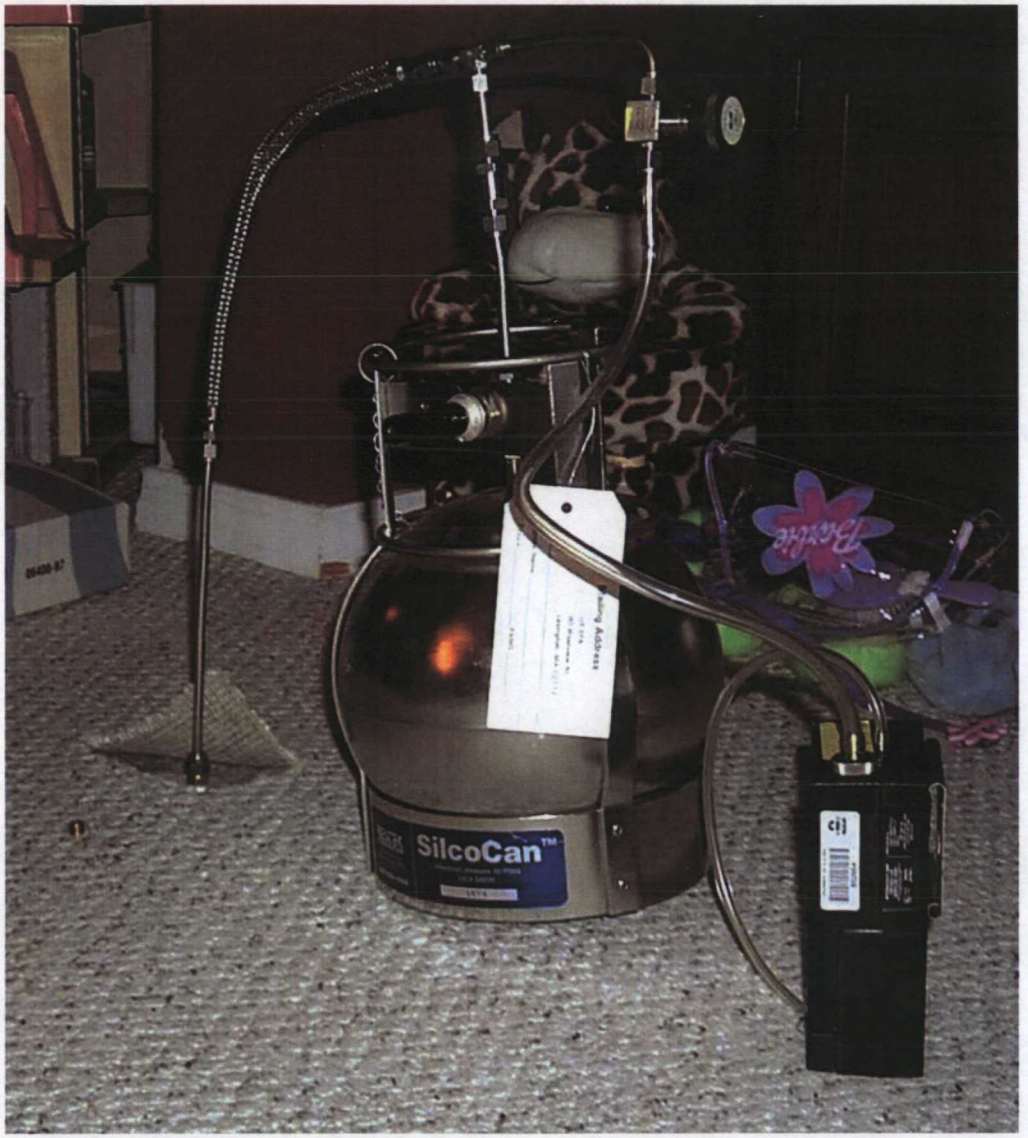
SOURCES:
THE PAYNE FIRM INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L031/2006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004
CITY OF MORAINE,
ABRAMS AERIAL SURVEY INC, PROJECT 38443, AASI 29616, 04/02/2008

figure 31
PARCEL 5175 - FORMER ALLIANCE EQUIPMENT & SUPPLY BUILDING 1
2075 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-61(015)GN-WA029 AUG 09/2011

Sampling Sub-Slab Gas with a 6-L Summa Canister

Sampling Sub-Slab Gas with a 6-L Summa Canister



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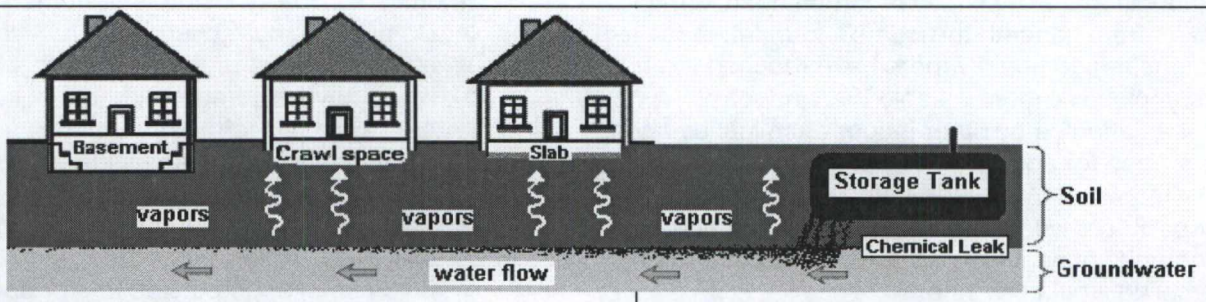
Vapor Intrusion

Answers to Frequently Asked Health Questions



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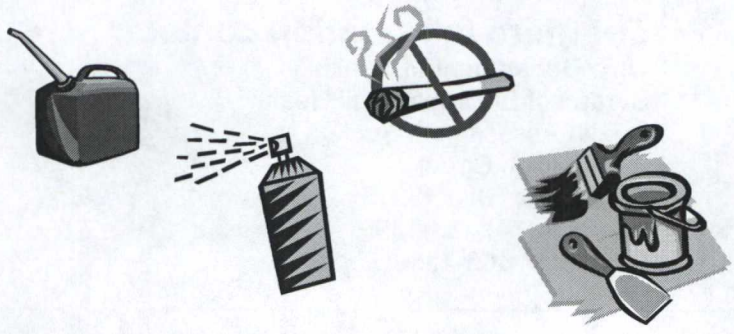
VOCs and vapors:

VOCs can be found in petroleum products such as gasoline or diesel fuels, in solvents used for industrial cleaning and are also used in dry cleaning. If there is a large spill or leak resulting in soil or groundwater contamination, vapor intrusion may be possible and should be considered a potential public health concern that may require further investigation.

Although large spills or leaks are a public health concern, other sources of VOCs are found in everyday household products and are a more common source of poor indoor air quality. Common products such as paint, paint strippers and thinners, hobby supplies (glues), solvents, stored fuels (gasoline or home heating fuel), aerosol sprays, new carpeting or furniture, cigarette smoke, moth balls, air fresheners and dry-cleaned clothing all contain VOCs.



Can you get sick from vapor intrusion?

You can get sick from breathing harmful chemical vapors. But getting sick will depend on:
How much you were exposed to (dose).
How long you were exposed (duration).
How often you were exposed (frequency).
How toxic the spill/leak chemicals are.
General Health, age, lifestyle: Young children, the elderly and people with chronic (on-going) health problems are more at risk to chemical exposures.

VOC vapors at high levels can cause a strong petroleum or solvent odor and some persons may experience eye and respiratory irritation, headache and/or nausea (upset stomach). These symptoms are usually temporary and go away when the person is moved to fresh air.

Lower levels of vapors may go unnoticed and a person may feel no health effects. A few individual VOCs are known carcinogens (cause cancer). Health officials are concerned with low-level chemical exposures that happen over many years and may raise a person's lifetime risk for developing cancer.

How is vapor intrusion investigated?

In most cases, collecting soil gas or groundwater samples near the spill site is done first to see if there is on-site contamination. If soil vapors or groundwater contamination are detected at a spill site, environmental protection and public health officials may then ask that soil vapor samples be taken from areas outside the immediate spill site and near any potential affected business or home. The Ohio Department of Health (ODH) does not usually recommend indoor air sampling for vapor intrusion before the on-site contamination is determined.

(continued on next page)

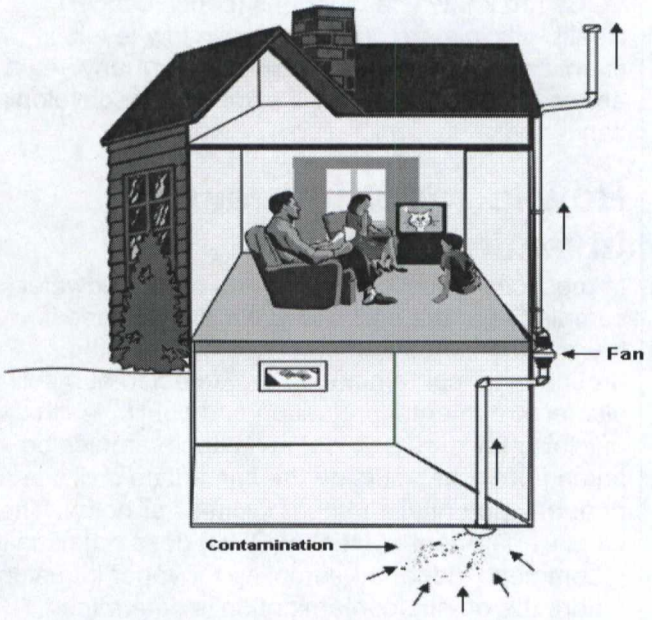
How is vapor intrusion investigated? (continued)

Because a variety of VOC sources are present in most homes, testing will not necessarily confirm VOCs in the indoor air are from VOC contamination in soils at nearby spill site. But if additional sampling is recommended, samples may be taken from beneath the home's foundation (called sub-slab samples), to see if vapors have reached the home. Sub-slab samples are more reliable than indoor air samples and are not as affected by other indoor chemical sources. If there was a need for additional sampling on a private property, homeowners would be contacted by the cleanup contractor or others working on the cleanup site and their cooperation and consent would be requested before any testing/sampling would be done.

What happens if a vapor intrusion problem is found?

If vapor intrusion is having an effect on the air in your home, the most common solution is to install a *radon mitigation system*. A radon mitigation system will prevent gases in the soil from entering the home. A low amount of suction is applied below the foundation and the vapors are vented to the outside. The system uses minimal electricity and should not noticeably affect heating and cooling efficiency. This mitigation system also prevents radon from entering the home, an added health benefit. Usually, the party responsible for cleaning up the contamination is also responsible for paying for the installation of this system. Once the contamination is cleaned up, the system should no longer be needed. In homes with on going radon problems, ODH suggests these systems remain in place permanently.

Radon Mitigation System



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- If you smoke, go outside and/or open the windows to ventilate the second-hand, VOC-containing smoke outdoors.
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- Most VOCs are a fire hazard. Make sure these chemicals are stored in appropriate containers and in a well-ventilated location and away from an open pilot light (flame) of a gas water heater or furnace.
- Fresh air will help prevent both build up of chemical vapors in the air and mold growth. Occasionally open the windows and doors and ventilate.
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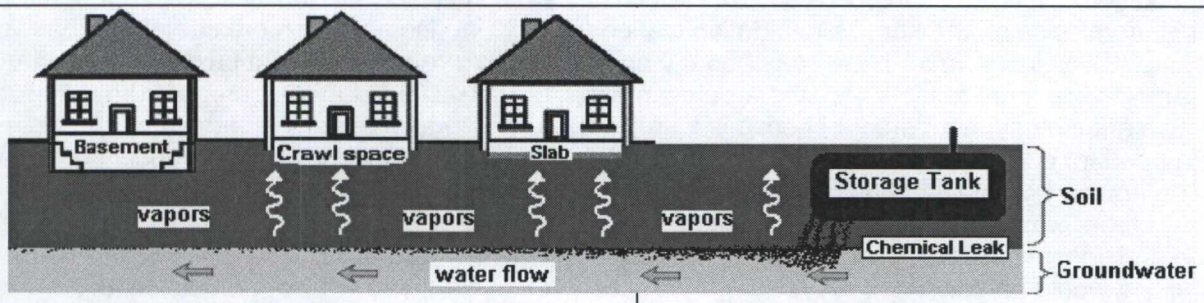
Vapor Intrusion

Answers to Frequently Asked Health Questions



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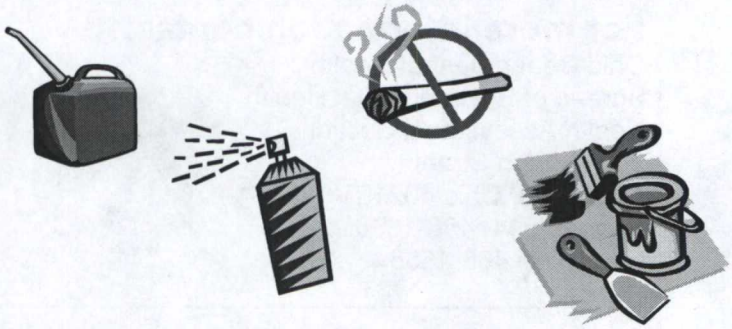

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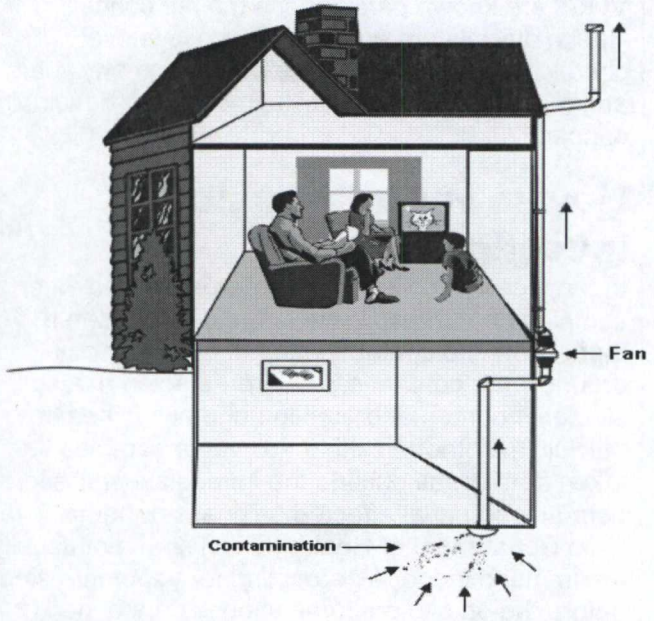

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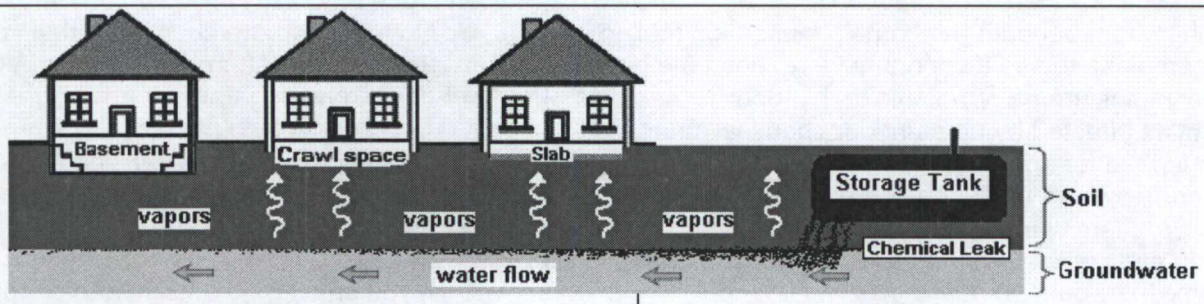

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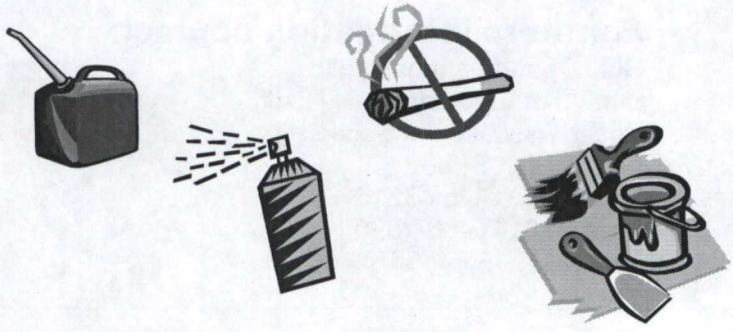

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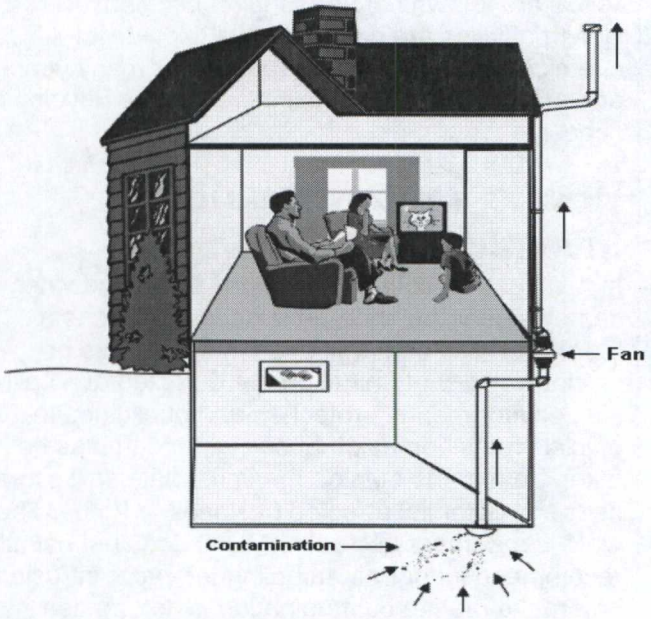

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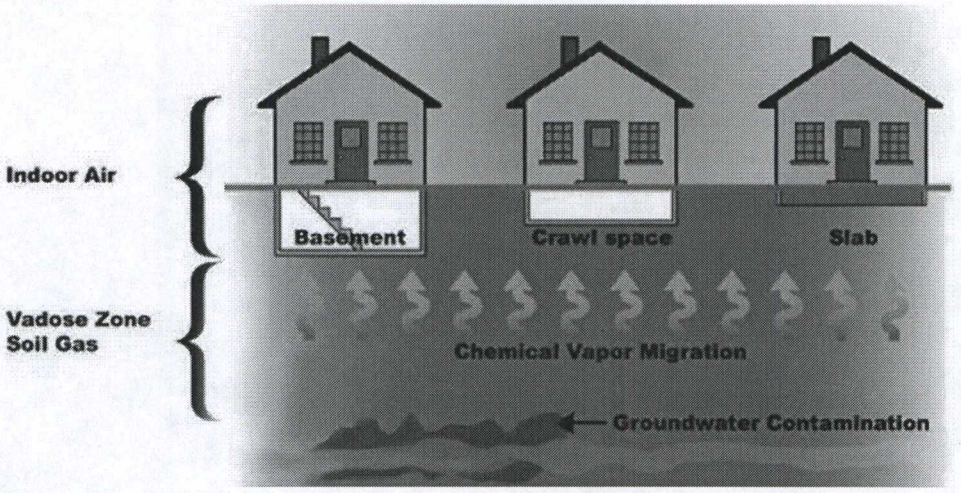
Created September 2004

VAPOR INTRUSION – SUB-SLAB AND INDOOR AIR SAMPLING

What is Vapor Intrusion?

- Volatile organic compounds (VOCs) are present in groundwater associated with historical industrial activities
- VOCs in groundwater can volatilize and move through the soil column into indoor air
- VOCs can enter a building through cracks in the foundation, a dirt floor, or a dirt crawlspace.

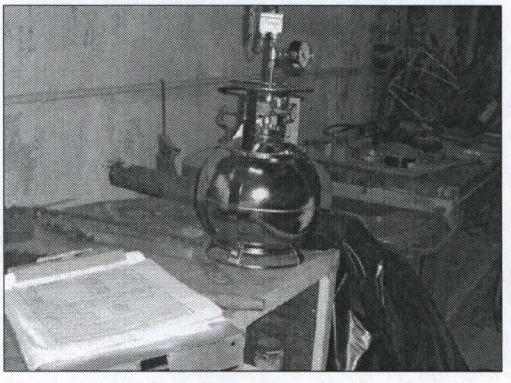


How is Vapor Intrusion Investigated?

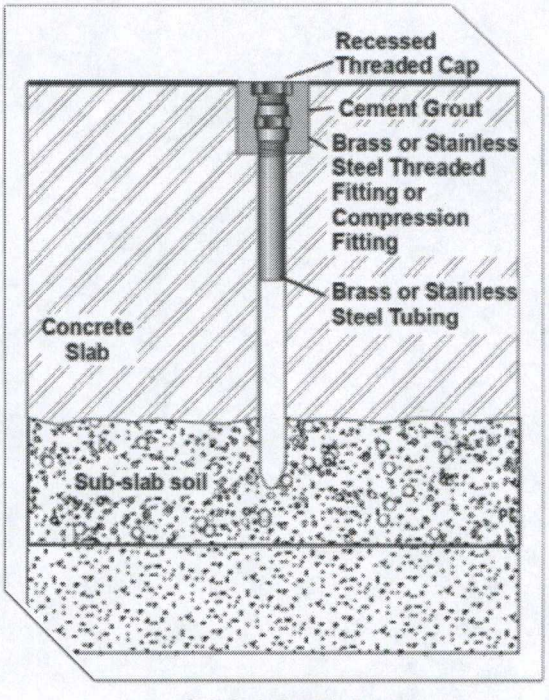
- Groundwater and soil-gas samples are usually collected first. If elevated concentrations are detected, indoor air and sub-slab sampling is typically completed.
- Collect indoor air and sub-slab soil gas samples. Sampling criteria is dependent upon home construction and foundation type.

Indoor Air Sampling

- Samples are typically collected from the following areas, if present:
  - Crawlspace
  - First Floor of Structure
  - Basement
- For a residential property, Summa canisters are used to collect the sample over a 24-hour period.



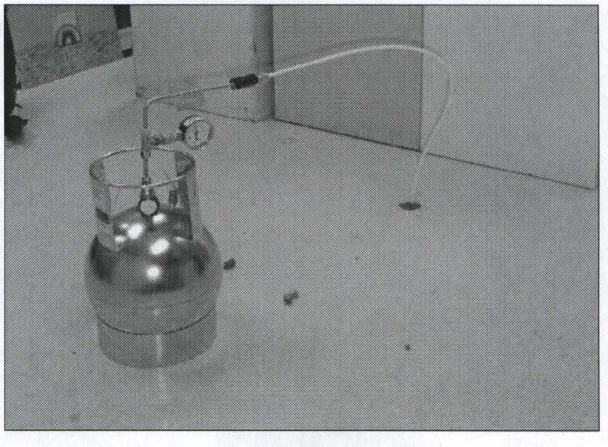
Indoor Air Sample Collection



Sub-Slab Sample Point

Sub-Slab Sampling

- Install permanent sub-slab sample point(s). Allow grout to set-up for at least 24 hours prior to sampling.
- Complete helium leak test to ensure that the seal around the sample point is tight.
- Collect a sub-slab sample(s) using a Summa canister (typically over an approximately 30-minute period).

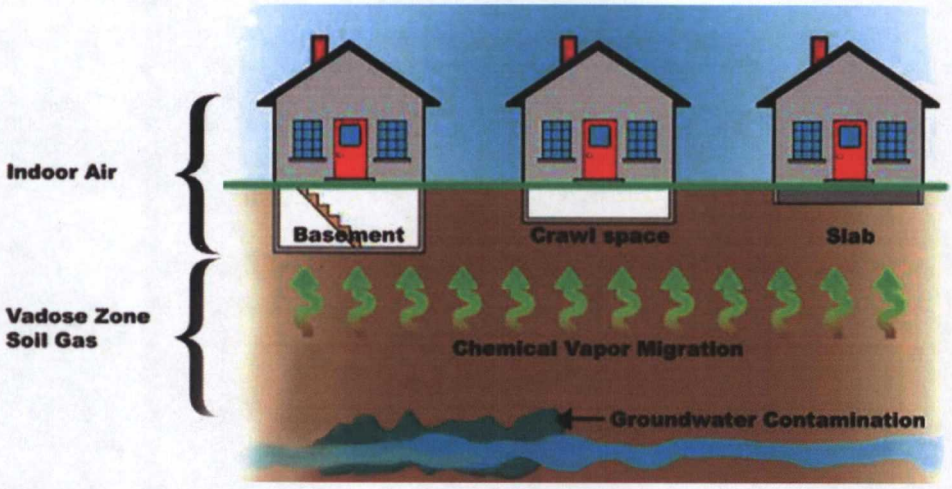


Sub-Slab Sample Collection

VAPOR INTRUSION – SUB-SLAB AND INDOOR AIR SAMPLING

What is Vapor Intrusion?

- Volatile organic compounds (VOCs) are present in groundwater associated with historical industrial activities
- VOCs in groundwater can volatilize and move through the soil column into indoor air
- VOCs can enter a building through cracks in the foundation, a dirt floor, or a dirt crawlspace.



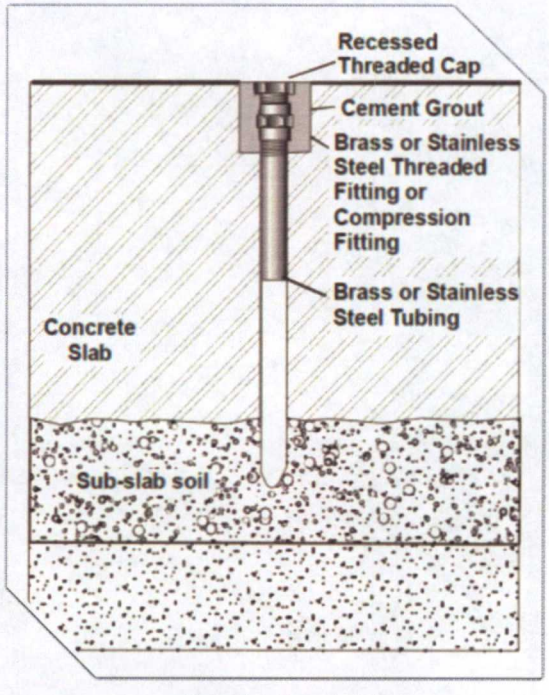
How is Vapor Intrusion Investigated?

- Groundwater and soil-gas samples are usually collected first. If elevated concentrations are detected, indoor air and sub-slab sampling is typically completed.
- Collect indoor air and sub-slab soil gas samples. Sampling criteria is dependent upon home construction and foundation type.

Indoor Air Sampling

- Samples are typically collected from the following areas, if present:
  - Crawlspace
  - First Floor of Structure
  - Basement
- For a residential property, Summa canisters are used to collect the sample over a 24-hour period.

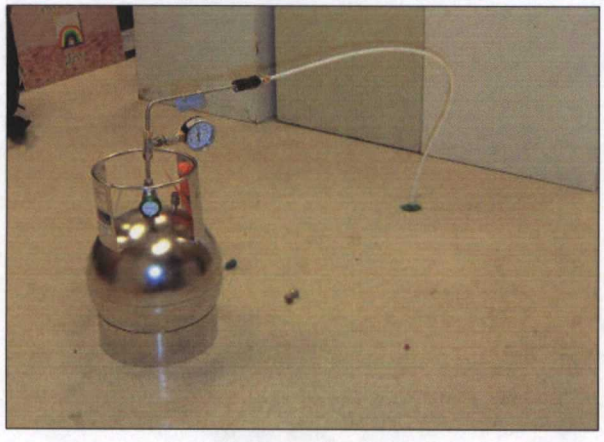
Indoor Air Sample Collection



Sub-Slab Sample Point

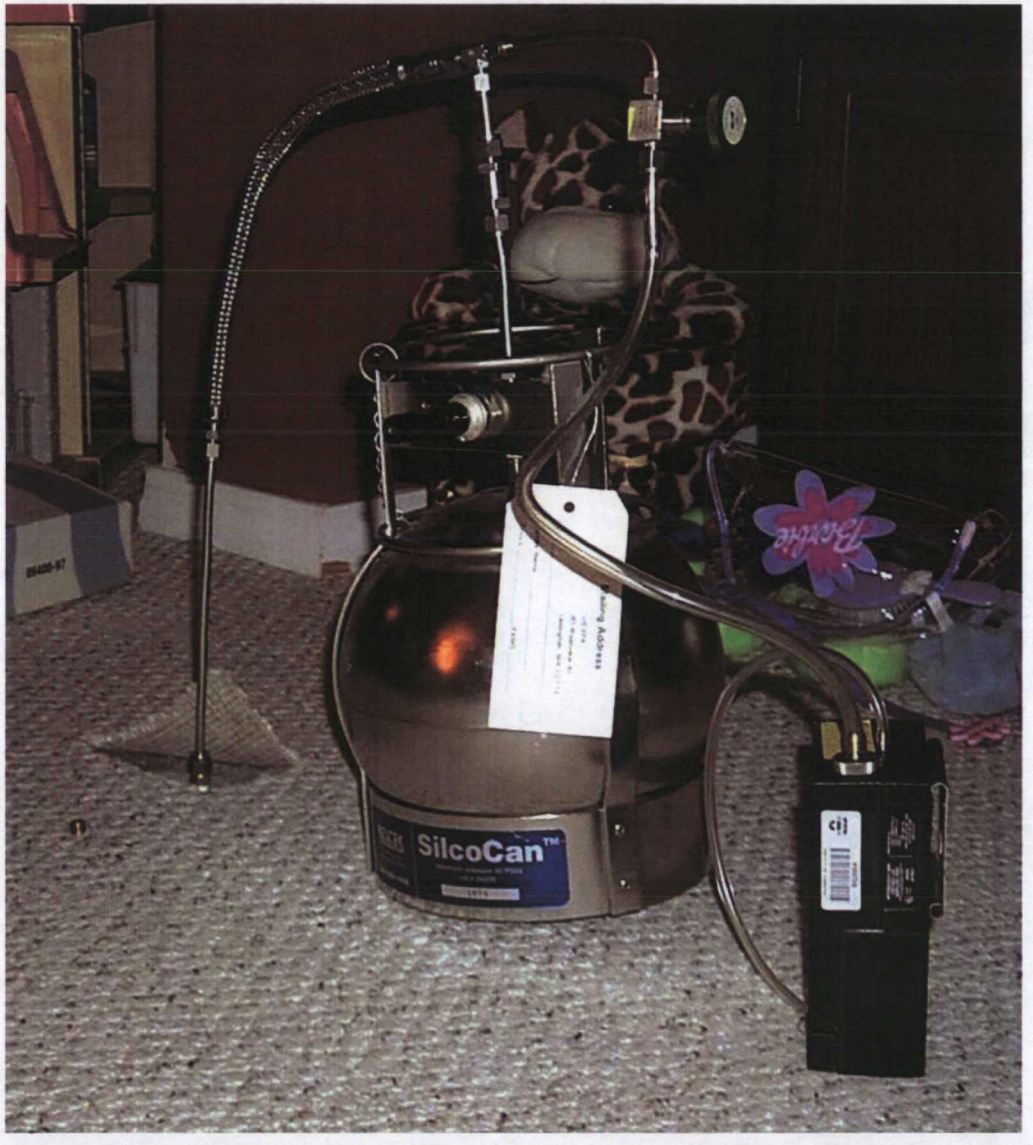
Sub-Slab Sampling

- Install permanent sub-slab sample point(s). Allow grout to set-up for at least 24 hours prior to sampling.
- Complete helium leak test to ensure that the seal around the sample point is tight.
- Collect a sub-slab sample(s) using a Summa canister (typically over an approximately 30-minute period).

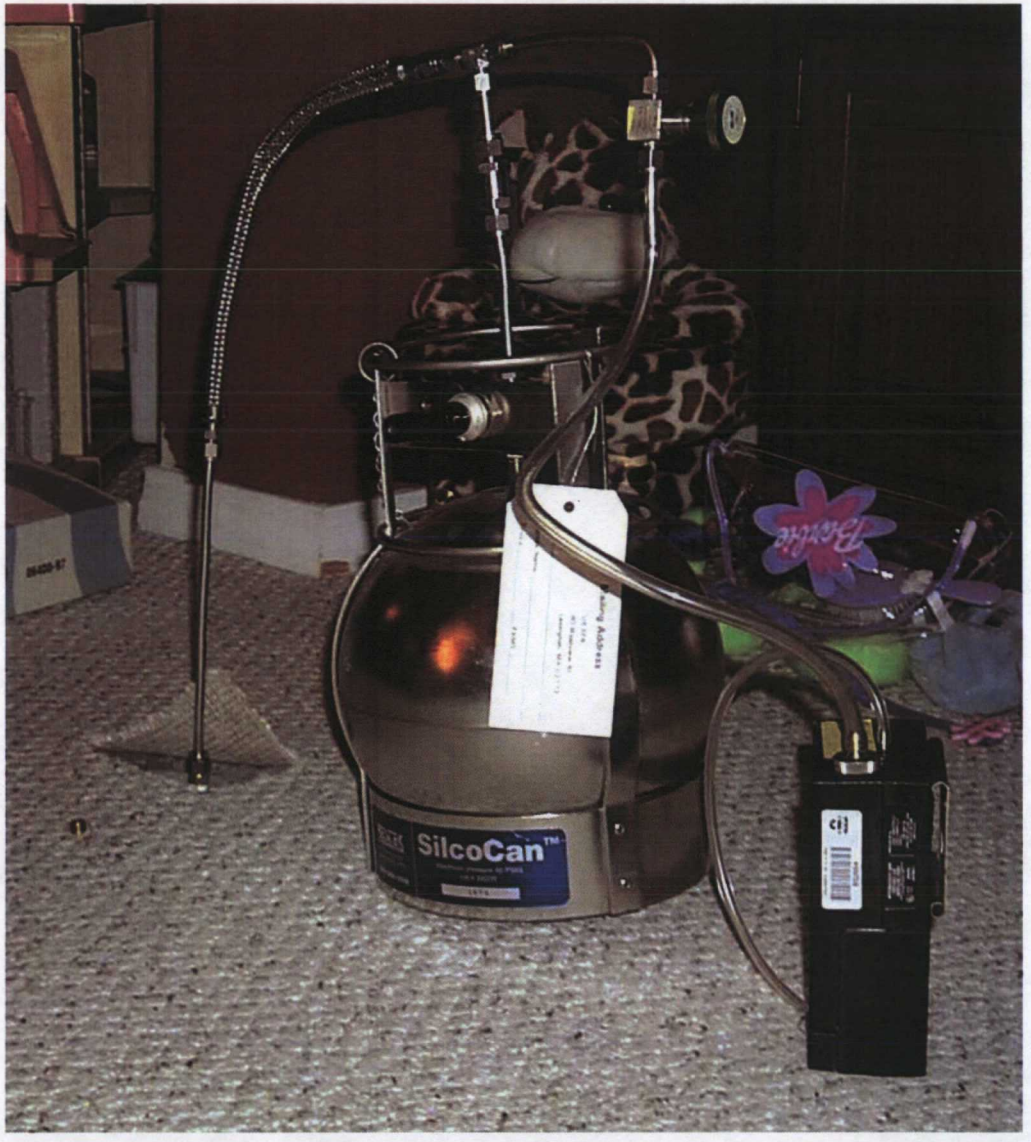


Sub-Slab Sample Collection

Sampling Sub-Slab Gas with a 6-L Summa Canister



Sampling Sub-Slab Gas with a 6-L Summa Canister



Site Location

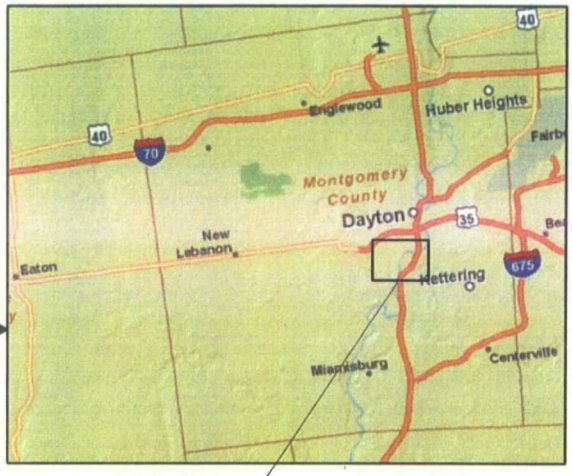
Superfund

U.S. Environmental Protection Agency

South Dayton Dump and Landfill
Montgomery County, OH

OHD980611388

State



County

Site

N

0 100 200 400 600 800 Meters

Legend

Site Boundary

OU1 Boundary

Created by Andrea Hicks
U.S. EPA Region 5 on 2/25/2011
Image Date: 2009/2010

EPA Disclaimer: Please be advised that area depicted in the map have been estimated. The map does not create any rights enforceable by any party. EPA may refine or change this data and map at any time.

GEOS
Groundwater Evaluation and Optimization System